

IN THE SPECIFICATION

Please replace paragraph 0050 with the following rewritten paragraph:

[0050] Figure 8 illustrates a computer system [[1201]] 1401 upon which an embodiment of the present invention may be implemented. The computer system [[1201]] 1401 may be used as the controller of Figures 1A, 1B, or 2, or a similar controller that may be used with the systems of these figures to perform any or all of the functions described above. The computer system [[1201]] 1401 includes a bus [[1202]] 1402 or other communication mechanism for communicating information, and a processor [[1203]] 1403 coupled with the bus [[1202]] 1402 for processing the information. The computer system [[1201]] 1401 also includes a main memory [[1204]] 1404, such as a random access memory (RAM) or other dynamic storage device (e.g., dynamic RAM (DRAM), static RAM (SRAM), and synchronous DRAM (SDRAM)), coupled to the bus [[1202]] 1402 for storing information and instructions to be executed by processor [[1203]] 1403. In addition, the main memory [[1204]] 1404 may be used for storing temporary variables or other intermediate information during the execution of instructions by the processor [[1203]] 1403. The computer system [[1201]] 1401 further includes a read only memory (ROM) [[1205]] 1405 or other static storage device (e.g., programmable ROM (PROM), erasable PROM (EPROM), and electrically erasable PROM (EEPROM)) coupled to the bus [[1202]] 1402 for storing static information and instructions for the processor [[1203]] 1403.

Please replace the second paragraph number 0050 with the following rewritten paragraph:

~~{0050}~~ **[0051]** The computer system [[1201]] 1401 also includes a disk controller [[1206]] 1406 coupled to the bus [[1202]] 1402 to control one or more storage devices for storing information and instructions, such as a magnetic hard disk [[1207]] 1407, and a removable media drive [[1208]] 1408 (e.g., floppy disk drive, read-only compact disc drive, read/write compact disc drive, compact disc jukebox, tape drive, and removable magneto-optical drive). The storage devices may be added to the computer system [[1201]] 1401 using an

appropriate device interface (e.g., small computer system interface (SCSI), integrated device electronics (IDE), enhanced-IDE (E-IDE), direct memory access (DMA), or ultra-DMA).

Please replace paragraph 0051 with the following rewritten paragraph:

~~{0051}~~ **[0052]** The computer system ~~[[1201]]~~ 1401 may also include special purpose logic devices (e.g., application specific integrated circuits (ASICs)) or configurable logic devices (e.g., simple programmable logic devices (SPLDs), complex programmable logic devices (CPLDs), and field programmable gate arrays (FPGAs)). The computer system may also include one or more digital signal processors (DSPs) such as the TMS320 series of chips from Texas Instruments, the DSP56000, DSP56100, DSP56300, DSP56600, and DSP96000 series of chips from Motorola, the DSP1600 and DSP3200 series from Lucent Technologies or the ADSP2100 and ADSP21000 series from Analog Devices. Other processors especially designed to process analog signals that have been converted to the digital domain may also be used.

Please replace paragraph 0052 with the following rewritten paragraph:

~~{0052}~~ **[0053]** The computer system ~~[[1201]]~~ 1401 may also include a display controller ~~[[1209]]~~ 1409 coupled to the bus ~~[[1202]]~~ 1402 to control a display ~~[[1210]]~~ 1410, such as a cathode ray tube (CRT), for displaying information to a computer user. The computer system includes input devices, such as a keyboard ~~[[1211]]~~ 1411 and a pointing device ~~[[1212]]~~ 1412, for interacting with a computer user and providing information to the processor ~~[[1203]]~~ 1403. The pointing device ~~[[1212]]~~ 1412, for example, may be a mouse, a trackball, or a pointing stick for communicating direction information and command selections to the processor ~~[[1203]]~~ 1403 and for controlling cursor movement on the display ~~[[1210]]~~ 1410. In addition, a printer may provide printed listings of data stored and/or generated by the computer system ~~[[1201]]~~ 1401.

Please replace paragraph 0053 with the following rewritten paragraph:

~~{0053}~~ **[0054]** The computer system ~~[[1201]]~~ 1401 performs a portion or all of the processing steps of the invention in response to the processor ~~[[1203]]~~ 1403 executing one or more sequences of one or more instructions contained in a memory, such as the main memory ~~[[1204]]~~ 1404. Such instructions may be read into the main memory ~~[[1204]]~~ 1404 from another computer readable medium, such as a hard disk ~~[[1207]]~~ 1407 or a removable media drive ~~[[1208]]~~ 1408. One or more processors in a multi-processing arrangement may also be employed to execute the sequences of instructions contained in main memory ~~[[1204]]~~ 1404. In alternative embodiments, hard-wired circuitry may be used in place of or in combination with software instructions. Thus, embodiments are not limited to any specific combination of hardware circuitry and software.

Please replace paragraph 0054 with the following rewritten paragraph:

~~{0054}~~ **[0055]** As stated above, the computer system ~~[[1201]]~~ 1401 includes at least one computer readable medium or memory for holding instructions programmed according to the teachings of the invention and for containing data structures, tables, records, or other data described herein. Examples of computer readable media are compact discs, hard disks, floppy disks, tape, magneto-optical disks, PROMs (EPROM, EEPROM, flash EPROM), DRAM, SRAM, SDRAM, or any other magnetic medium, compact discs (e.g., CD-ROM), or any other optical medium, punch cards, paper tape, or other physical medium with patterns of holes, a carrier wave (described below), or any other medium from which a computer can read.

Please replace paragraph 0055 with the following rewritten paragraph:

~~{0055}~~ **[0056]** Stored on any one or on a combination of computer readable media, the present invention includes software for controlling the computer system ~~[[1201]]~~ 1401, for driving a device or devices for implementing the invention, and for enabling the computer system ~~[[1201]]~~ 1401 to interact with a human user (e.g., print production personnel). Such

software may include, but is not limited to, device drivers, operating systems, development tools, and applications software. Such computer readable media further includes the computer program product of the present invention for performing all or a portion (if processing is distributed) of the processing performed in implementing the invention.

Please replace paragraph 0056 with the following rewritten paragraph:

~~{0056}~~ [0057] The computer code devices of the present invention may be any interpretable or executable code mechanism, including but not limited to scripts, interpretable programs, dynamic link libraries (DLLs), Java classes, and complete executable programs. Moreover, parts of the processing of the present invention may be distributed for better performance, reliability, and/or cost.

Please replace paragraph 0057 with the following rewritten paragraph:

~~{0057}~~ [0058] The term “computer readable medium” as used herein refers to any medium that participates in providing instructions to the processor ~~[[1203]]~~ 1403 for execution. A computer readable medium may take many forms, including but not limited to, non-volatile media, volatile media, and transmission media. Non-volatile media includes, for example, optical, magnetic disks, and magneto-optical disks, such as the hard disk ~~[[1207]]~~ 1407 or the removable media drive ~~[[1208]]~~ 1408. Volatile media includes dynamic memory, such as the main memory ~~[[1204]]~~ 1404. Transmission media includes coaxial cables, copper wire and fiber optics, including the wires that make up the bus ~~[[1202]]~~ 1402. Transmission media also may also take the form of acoustic or light waves, such as those generated during radio wave and infrared data communications.

Please replace paragraph 0058 with the following rewritten paragraph:

~~{0058}~~ [0059] Various forms of computer readable media may be involved in carrying out one or more sequences of one or more instructions to processor ~~[[1203]]~~ 1403 for execution. For example, the instructions may initially be carried on a magnetic disk of a remote

computer. The remote computer can load the instructions for implementing all or a portion of the present invention remotely into a dynamic memory and send the instructions over a telephone line using a modem. A modem local to the computer system 1401 may receive the data on the telephone line and use an infrared transmitter to convert the data to an infrared signal. An infrared detector coupled to the bus 1402 can receive the data carried in the infrared signal and place the data on the bus 1402. The bus 1402 carries the data to the main memory 1404, from which the processor 1403 retrieves and executes the instructions. The instructions received by the main memory 1404 may optionally be stored on storage device 1407 or 1408 either before or after execution by processor 1403.

Please replace paragraph 0059 with the following rewritten paragraph:

~~{0059}~~ 0060 The computer system 1401 also includes a communication interface 1413 coupled to the bus 1402. The communication interface 1413 provides a two-way data communication coupling to a network link 1414 that is connected to, for example, a local area network (LAN) 1415, or to another communications network 1416 such as the Internet. For example, the communication interface 1413 may be a network interface card to attach to any packet switched LAN. As another example, the communication interface 1413 may be an asymmetrical digital subscriber line (ADSL) card, an integrated services digital network (ISDN) card or a modem to provide a data communication connection to a corresponding type of communications line. Wireless links may also be implemented. In any such implementation, the communication interface 1413 sends and receives electrical, electromagnetic or optical signals that carry digital data streams representing various types of information.

Please replace paragraph 0060 with the following rewritten paragraph:

~~{0060}~~ 0061 The network link 1414 typically provides data communication through one or more networks to other data devices. For example, the network link 1414

1414 may provide a connection to another computer through a local network [[1215]] 1415 (e.g., a LAN) or through equipment operated by a service provider, which provides communication services through a communications network [[1216]] 1416. The local network [[1214]] 1414 and the communications network [[1216]] 1416 use, for example, electrical, electromagnetic, or optical signals that carry digital data streams, and the associated physical layer (e.g., CAT 5 cable, coaxial cable, optical fiber, etc). The signals through the various networks and the signals on the network link [[1214]] 1414 and through the communication interface [[1213]] 1413, which carry the digital data to and from the computer system [[1201]] 1401 maybe implemented in baseband signals, or carrier wave based signals. The baseband signals convey the digital data as unmodulated electrical pulses that are descriptive of a stream of digital data bits, where the term “bits” is to be construed broadly to mean symbol, where each symbol conveys at least one or more information bits. The digital data may also be used to modulate a carrier wave, such as with amplitude, phase and/or frequency shift keyed signals that are propagated over a conductive media, or transmitted as electromagnetic waves through a propagation medium. Thus, the digital data may be sent as unmodulated baseband data through a “wired” communication channel and/or sent within a predetermined frequency band, different than baseband, by modulating a carrier wave. The computer system [[1201]] 1401 can transmit and receive data, including program code, through the network(s) [[1215]] 1415 and [[1216]] 1416, the network link [[1214]] 1414, and the communication interface [[1213]] 1413. Moreover, the network link [[1214]] 1414 may provide a connection through a LAN [[1215]] 1415 to a mobile device [[1217]] 1417 such as a personal digital assistant (PDA) laptop computer, or cellular telephone.

Please replace paragraph 0061 with the following rewritten paragraph:

~~{0061}~~ [0062] Although only certain embodiments of this invention have been described in detail above, those skilled in the art will readily appreciate that many modifications are possible in the exemplary embodiment without materially departing from the novel teachings and advantages of this invention. Accordingly, all such modifications are intended to be included within the scope of this invention.